

Notice of Allowability

Application No.

10/751,311

Examiner

Peter G O'Sullivan

Applicant(s)

KUNZ ET AL.

Art Unit

1621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to _____.
2. ☒ The allowed claim(s) is/are 1-9.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

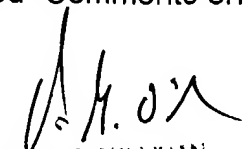
Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

PETER O'SULLIVAN
PATENT EXAMINER

The following is an examiner's statement of reasons for allowance: The instant application is held to be in condition for allowance inasmuch as the prior art does not teach or suggest applicants' invention. Nolan et al., US 6,316,380, discloses an N-heterocyclic carbene catalyst system "useful in many coupling reactions" which comprises "at least one transition metal. (s. abstract). Although Nolan et al. does disclose an amination reaction, the aryl halide reactant shown does not have a nitro group (a strong deactivating group) and the catalytic metal used is palladium (s. example 2). Nolan teaches away from applicants' invention by disclosing that "more preferred transition metals are the group 10 metals, particularly nickel and palladium" (s. Col. 3, ll. 19-21). Gujadhur et al., Tetrahedron Letters 42 (2001) 4791-4793, also teaches away from applicants' invention. They disclose, "The Ullmann coupling often requires high temperatures (~200 degrees Celsius) and the use of copper salts in greater than stoichiometric amounts. The reaction is also very sensitive to the substitution on the aryl halide. Due to these limitations, copper salts have largely been supplanted by palladium catalysts (p. 4791). Gujadhur et al. use copper salts as catalysts instead of palladium in order to prepare a triphenylamine, not a diphenylamine as in applicants' process. Giera et al., US 6,316,673, is cited as state of the art only.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


PETER O'SULLIVAN
PRIMARY EXAMINER
GROUP 1200